EMERGENCY NR 328 - SUBCHAPTER III

Wisconsin Administrative Code

SHORE EROSION CONTROL STRUCTURE ON RIVERS AND STREAMS

Effective May 8, 2006

NR 328.31 Purpose. The purpose of this subchapter is to establish reasonable procedures and limitations for general permits and individual permits for placement of shore erosion control structures on rivers and streams as regulated under s. 30.12, Stats., in order to protect the public rights and interest in the navigable, public waters of the state as defined in s. 30.10, Stats.

- **NR 328.32 Applicability. (1)** Except as provided in s. 30.2023, Stats., this subchapter applies to construction, placement and maintenance of shore erosion control structures regulated under s. 30.12(1), (3)(br) and (3m), Stats. Any person that intends to construct, place or maintain a shore erosion control structure in any river or stream shall comply with all applicable provisions of this subchapter and any permit issued under this subchapter.
- (2) Shore erosion control measures such as grading to establish a stable slope, revegetation or other biostabilization methods that do not involve the placement of structures on the bed of a waterway are not regulated under s. 30.12, Stats., or this subchapter.

Note: A permit is required under s. 30.19, Stats., and ch. NR 341 if land disturbance or excavation exceeds 10,000 square feet on the bank of the navigable waterway. Bank shaping activities necessary to protect stream and river shorelines from erosion on lands used entirely for agriculture are exempt from this subchapter.

NR 328.33 Definitions. In this subchapter:

- (1) "Biostabilization" means a structure that relies solely on biological materials and may include bank reshaping. Biological shore erosion control structures include but are not limited to native vegetation, fiber rolls, fiber mats, live stakes, brush mattresses, fascines, branch packing, encapsulated soil lift.
- (2) "Hard armoring" means a shore erosion control structure that relies solely on inert materials and includes but is not limited to riprap, reno mattresses (slabs of rock encapsulated in gabion baskets, laid on a slope) and seawalls.
- (3) "Inert materials" means those materials that slowly degrade, such as chemically treated wood, stone, stainless and galvanized steel, plastics and synthetic polymers.
- (4) "Integrated bank treatment" means a structure that combines 2 separate treatments: toe protection at the base of the bank and biostabilization on the remaining upper portion of the bank. Above the toe protection, the remainder of the bank may be reshaped, and may include but is not limited to revegetation by seeding or with brush layering, brush mattresses, fiber (coir) rolls, live stakes or wattles. Biostabilization may also be incorporated as part of the toe protection.
- **(5)** "Ordinary high water mark" means the point on the bank or shore up to which the presence and action of water is so continuous as to leave a distinct mark either by erosion, destruction of terrestrial vegetation or other easily recognizable characteristics.
 - **(6)** "Toe" means the most waterward edge of a shore erosion control structure.
- (7) "Toe protection" means a structure that relies on inert materials such as stone and structural measures alone, or in combination with other biological materials to protect the base of the bank.
- **NR 328.34 General permits. (1)** PROCEDURES. (a) General permits shall be processed according to the procedures in ch. NR 310.

- (b) If the department determines that a proposal submitted under this section has the potential to impact an endangered or threatened species in accordance with s. 29.604, Stats., the application shall be deemed incomplete. The department may not consider the application complete or issue a general permit until the applicant submits documentation to demonstrate one of the following:
- 1. The project avoids impacts to the endangered or threatened species in accordance with s. 29.604, Stats.
 - 2. The project has received an incidental take authorization under s. 29.604, Stats.
- (c) If the applicant modifies the project plans to meet the requirements of par. (b), the modified plans shall be submitted before the department may consider the application complete or issue a general permit.
- (2) APPLICABLE ACTIVITIES. Projects that meet all the criteria in sub. (3) and either sub. (4) or (5) shall be eligible for general permit coverage under ss. 30.12(3)(br) and 30.206, Stats.

Note: Eligibility for an exemption or general permit does not automatically result in a federal permit or state water quality certification for fill in wetlands. Some projects involving minimal wetland fill may be eligible for authorization under a U.S. Army Corps of Engineers general permit which has already been granted state water quality certification [see non-reporting and 404 GP activities in the table at http://www.mvp.usace.army.mil/docs/regulatory/WIMATRIX.htm] or a general permit under s. 281.36(8), Stats. (under development) All other projects affecting wetlands will require individual water quality certification including public notice as required by s. 401, Federal Clean Water Act, and s. 281.36(2), Stats., and carried out under chs. NR 103 and 299. For further instructions, see the department's website at www.dnr.wi.gov under the topic "Waterway and Wetland Permits."

- (3) GENERAL STANDARDS. (a) The structure may not be placed in a wetland.
- (b) The project may not occur on navigable waterways greater than 35 feet wide measured from ordinary high water mark to ordinary high water mark.
- (c) The erosion control structure design and placement may not result in a net decrease in the density or size-structure of tree-falls or logs in the water or intersecting the bank.
- (d) Except for the counties of Buffalo, Columbia, Crawford, Dane, Dunn, Grant, Green, Iowa, Kenosha, La Crosse, Lafayette, Pepin, Pierce, Racine, Richland, Rock, St. Croix, Sauk, Trempealeau, Vernon, and Walworth, all trees greater than 4" DBH (diameter breast high) removed as part of the erosion control project within 35 feet of the ordinary high water mark shall be incorporated into the waterward portion of the erosion control design.

Note: The listed counties are located in ecological landscapes of the state where riparian habitats are typified by oak barrens, oak opening, mesic prairie, wet prairie, and wet-mesic prairie natural communities. County-level designations were made from interpretations of Wisconsin's Ecological Landscape maps and Finley's Original Vegetation Map of Wisconsin.

- (e) The structure may be placed only by a riparian.
- (f) To minimize adverse impacts on fish movement, fish spawning, egg incubation periods and high stream flows, placement may not occur during the following time periods:
- 1. For trout streams identified under s. NR 1.02(7) and perennial tributaries to those trout streams, September 15 through May 15.
- 2. For all waters not identified in subd. 1. and located south of state highway 29, March 15 through May 15.

- 3. For all waters not identified in subd. 1. and located north of state highway 29, April 1 through June 1.
- 4. The applicant may request that the requirement in subd. 1., 2., or 3. be waived by the department on a case-by-case basis, by submitting a written statement signed by the local department fisheries biologist, documenting consultation about the proposed shore erosion control project, and that the local department fisheries biologist has determined that the requirements of this paragraph are not necessary to protect fish spawning for the proposed project.
- (g) Any grading, excavation and land disturbance shall be confined to the minimum necessary for the construction and may not exceed 10,000 square feet.

Note: A permit is required under s. 30.19, Stats., and ch. NR 341 if land disturbance or excavation exceeds 10,000 square feet on the bank of the navigable waterway. Bank shaping activities necessary to protect stream and river shorelines from erosion on lands used entirely for agriculture are exempt from this subchapter.

(h) Erosion control measures shall meet or exceed the technical standards for erosion control approved by the department under subch. V of ch. NR 151. Any area where topsoil is exposed during construction shall be immediately sodded, seeded and mulched, covered with erosion mat or riprapped to stabilize disturbed areas and prevent soils from being eroded and washed into the waterway.

Note: These standards can be found at the following website: http://dnr.wi.gov/org/water/wm/nps/stormwater/techstds.htm

- (i) Unless part of a permanent stormwater management system, all temporary erosion and sediment control practices shall be removed upon final site stabilization. Areas disturbed during construction or installation shall be restored.
- (j) Vegetation, such as seeding and dormant plantings, shall be plant species native to the area of Wisconsin where the project is located. Non-invasive cool season species such as Virginia wild rye, Timothy, alfalfa, alsike clover, orchard grass, Smooth brome grass and red top, may be incorporated into native seed mixes for the purpose of rapid stabilization of critical sites currently in agricultural use.
- (k) All equipment used for the project shall be designed and properly sized to minimize the amount of sediment that can escape into the water.
- (L) No waterward extension of the property is permitted other than what is reasonably necessary to conduct the project and protect the existing bank. No soil or similar fill material may be placed in a wetland or below the ordinary high water mark of any navigable waterway.
 - (m) The stabilization method shall follow the natural contour of the shoreline.
 - (n) Shoreline protection measures shall begin and end at a stabilized or controlled point.
- (o) Except as required for appropriate toe installation of the erosion control structure, dredging is not permitted under this section.
 - (p) The stabilization practices shall be maintained in good condition.
- (4) BIOSTABILIZATION. Biostabilization on the bed or bank of a navigable river or stream may be authorized under this general permit if it meets all of the following requirements and limitations:
- (a) Fiber (coir) rolls shall be appropriately secured using methods such as hardwood stakes or earth anchors.

Note: Spacing between anchoring devices will need to reflect anticipated stream flow velocities.

- (b) Structural stabilization practices shall be sloped to 1.5 horizontal to one foot vertical or flatter. Banks treated only with vegetation shall be sloped to 2 foot horizontal to one foot vertical or flatter.
- (5) INTEGRATED BANK TREATMENT. Integrated bank treatment on the bed or bank of a navigable river or stream may be authorized under this general permit if it meets all of the following requirements and limitations:
- (a) Integrated bank treatment may not be located on federal or state designated wild or scenic rivers under ss. 30.26 and 30.27, Stats.
- (b) Stone associated with toe protection shall be clean field stone or quarry stone appropriately sized according to the USDA, NRCS Wisconsin Supplement to the Engineering Field Handbook Chapter 16 Streambank and Shoreline Protection.

Note: These standards can be found at the following website: ttp://ftp-fc.sc.egov.usda.gov/WI/efh/efh-chapter16.pdf

(c) Toe protection materials may not be placed above the ordinary high water mark elevation plus one foot, except for the counties of Buffalo, Crawford, Grant, Iowa, Jackson, La Crosse, Lafayette, Monroe, Richland, Sauk, Trempealeau and Vernon, where toe protection materials may not be placed above the ordinary high water mark elevation plus 2 feet for projects immediately adjacent to agricultural fields in active cultivation.

Note: The listed counties are located in a unique geological area of the state untouched by glaciers, called the "Driftless Area." County-level designations were made from interpretations of the Ice Age Deposits of Wisconsin (1964) map by the Wisconsin Geological and Natural History Survey, University of Wisconsin - Extension.

- (d) Structural stabilization practices shall be sloped to 1.5 horizontal to one foot vertical or flatter. Banks treated only with vegetation shall be sloped to 2 feet horizontal to one foot vertical or flatter.
 - (e) The total project length may not exceed 500 linear feet per ¼ mile of stream (1320 feet).
- (6) INDIVIDUAL PERMIT REQUIRED. (a) Activities which do not meet the applicable standards in sub. (3) and either sub. (4) or (5), or are otherwise ineligible for a general permit, shall require an individual permit.
- (b) The department has authority under s. 30.206(3r), Stats., to require an individual permit in lieu of a general permit.
- **NR 328.35 Individual permits. (1)** PROCEDURES. (a) Individual permits shall be processed according to the procedures in ch. NR 310.
- (b) If the department determines that a proposal submitted under this section has the potential to impact an endangered or threatened species in accordance with s. 29.604, Stats., the application shall be deemed incomplete. The department may not consider the application complete or issue a general permit until the applicant submits documentation to demonstrate one of the following:
- 1. The project avoids impacts to the endangered or threatened species in accordance with s. 29.604, Stats.
 - 2. The project has received an incidental take authorization under s. 29.604, Stats.

- (c) If the applicant modifies the project plans to meet the requirements of par. (b), the modified plans shall be submitted before the department may consider the application complete or issue a general permit.
- (2) APPLICABLE ACTIVITIES. Any shore erosion control structure which is not authorized by a general permit under s. NR 328.34, requires authorization by an individual permit pursuant to s. 30.12(1), Stats.
- (3) STANDARDS. Construction, placement or maintenance of a shore erosion control structure on a river or stream that meets the standards in s. 30.12(3m), Stats., may be authorized under an individual permit.
- (4) EXISTING PERMITS. A shore protection structure which is authorized by an existing department permit shall continue to be authorized, provided the structure is maintained in compliance with all the conditions of the original permit. Any modifications to the structure that do not comply with the original permit conditions shall require a new individual permit and shall comply with all standards in this section.
- **NR 328.36 Enforcement. (1)** Noncompliance with the provisions of ss. 30.12 and 30.206, Stats., this subchapter, or any conditions of an exemption, general permit or individual permit issued by the department, constitutes a violation and may result in a forfeiture, fine or imprisonment. The department may seek abatement under s. 30.294, Stats., for any activity in violation of ss. 30.12 and 30.206, Stats.
- (2) If the activity may be authorized by a general permit under s. 30.206, Stats., failure of an applicant to follow the procedural requirements may not, by itself, result in abatement of the activity.
- (3) When an after-the-fact permit application has been filed with the department, the department shall follow the procedures in ch. NR 301 for violations.
- (4) Any violation of these rules shall be treated as a violation of the statutes they interpret or are promulgated under.
- (5) No person may place a shore erosion control structure in a navigable waterway if the activity is not eligible for an exemption, authorized by a general permit or individual permit issued under this subchapter, or otherwise authorized under this subchapter.